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09/856,544	12/20/2001	Bjorn Ludviksson	14014.0353U1	9811

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AVENTIS PHARMACEUTICALS, INC.
PATENTS DEPARTMENT
ROUTE 202-206, P.O. BOX 6800
BRIDGEWATER, NJ 08807-0800

Wrong atty.

EXAMINER
HADDAD, MAHER M

ART UNIT	PAPER NUMBER
1644	9

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/856,544	Applicant(s) LUDVIKSSON ET AL.	
	Examiner Maher M. Haddad	Art Unit 1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *8,9,18,19,24,25 and 29-43* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-17, 20-23 and 26-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *7-23-02* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-43 are pending.

2. A clear and obvious typographical error occurred in the restriction wherein inflammatory diseases were improperly included among the species election.

3. Applicant's election with traverse of Group I, claims 1-23 and 26-28, filed on 6-11-02, is acknowledged.

Applicant's traversal is on the grounds that the entire restriction requirement be reconsidered because the present application is a national phase application under 37 C.F.R.§ 371 and no unity of invention issue was raised during prosecution of original claims 1-43 in the PCT application by either the International Search Authority or the International Preliminary Examination Authority. This is not found persuasive because Applicant's inventions do not contribute a special technical feature when viewed over the prior art they do not have a single general inventive concept and so lack unity of invention as set forth in the previous Office Action.

The requirement is still deemed proper and is therefore made FINAL.

Applicant elected inflammatory bowel disease as the species. Claims 1-4, 11-14, 21-23 and 26-28 read on the elected species.

Upon reconsideration, Examiner has extended the search to cover asthma, rheumatoid arthritis, autoimmune disease, and graft versus host disease recited in claims 5-7, 10, 15-17 and 20.

4. Claims 24-25 and 29-43 (non-elected Groups II-VII) and claims 8-9 and 18-19 (non-elected species of the elected Group I) are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b) as being drawn to nonelected inventions.

5. Claims 1-7, 10-17, 20-23 and 26-28 are under examination as they read on a method of treating inflammation in a subject, comprising administering to the subject an $\alpha E\beta 7$ Mab and further $\alpha 4\beta 7$ wherein the inflammattion is inflammatory bowel disease, asthma, rheumatoid arthritis, autoimmune disease, and graft versus host disease.

6. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7, 10-17, 20-23 and 26-28 are is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of treating of inflammation associated with inflammatory bowel disease with αEβ7 Mab and further comprising administering an α4β7 Mab does not reasonably provide **enablement** for a method of treating **any inflammation** in a subject comprising **any antagonist** to αEβ7 in claim 1, wherein the antagonist is **any antibody** in claim 2; wherein the inflammation is associated with **asthma, rheumatoid arthritis, atoimmune diseases, or graft vs. host diseases** in claims 5-7 and 10 and further comprising another **therapeutic agent** in claim 21, wherein the other therapeutic agent is **any antibody** in claim 22, or a method of **preventing** inflammation in a subject, comprising, administering to the subject **any antagonist** to αEβ7 in claim 11, wherein the antagonist is **any antibody** in claim 12; wherein the antibody is an αEβ7 Mab and wherein the inflammation is associated with an **inflammatory bowel disease' asthma, rheumatoid arthritis, autoimmune diseases and host vs graft disease** in claims 14-17 and 20; the method further comprising administering **another therapeutic agent** in claim 26, wherein the other therapeutic agent is **any antibody** in claim 27, wherein the antibody is α4β7 Mab in claim 28. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and or use the invention commensurate in scope with this claim.

The specification disclosure does not enable one skilled in the art to practice the invention with out an undue amount of experimentation.

Besides αEβ7 Mab and α4β7 Mab, the specification fails to provide any guidance as to how to make and how to use any "antagonist", any "antibody", any "inflammation", or any "therapeutic agent".

Factors to be considered in determining whether undue experimentation is required to practice the claimed invention are summarized *In re Wands* (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)). The factors most relevant to this rejection are the scope of the claim, the amount of direction or guidance provided, the lack of sufficient working examples, the unpredictability in the art and the amount of experimentation required to enable one of skill in the art to practice the claimed invention.

Applicant has not provided sufficient biochemical information that distinctly identifies such "antagonist of αEβ7 ", "any antibody" and "therapeutic agent" other than αEβ7 Mab and α4β7 Mab antibody respectively. While any antagonist to αEβ7 Mab may have some notion of the activity of the "inhibitory agent", claiming biochemical molecules by such properties fails to provide sufficient guidance and direction as to how

the skilled artisan can make such agents, commensurate in scope with the claimed invention. The specification (page 7, line 9-18) fails to provide any guidance on how to make any antagonist of αEβ7, any antibody, another therapeutic agent that can be used to treat inflammation that associate with inflammatory bowel disease in a subject.

The current state of the art in antibody therapeutics and the predictability of treatment efficacy is complicated by the potential for antibody interactions with irrelevant or completing epitopes, Fc region engagement, reduced half life of antibody fragments, and immune response to the therapeutic antibodies (see Ward et al, pages 167-171, 1994 "consideration related to use of blocking antibodies"). Therefore, one skilled in the art at the time of the invention would not be able to predict which antagonists such as antibodies will elicit a first-dose reaction. Consequently the skilled artisan would not know how to use the instant invention as broadly claimed. While experimental testing techniques using cell surface receptor binding compounds are available, it is not routine in the art to use such methods when the expectation of success is unpredictable based on the instant disclosure. Thus, it would require an undue amount of experimentation of one skilled in the art to practice the invention as broadly claimed.

Also, at issue is whether or not the claimed method would function for "the treatment"/"the prevention" of inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease or the prevention of inflammation associated with inflammatory bowel disease. The nature of the invention is such that it would require the administration of anti-αEβ7 and anti-α4β7 mAb that would prevent a subject from inducing colitis. The exemplification is drawn to decrease in the severity of the colitis in IL-2-/- mice model, as indicated by the reduction in colitis severity score (CSS) to demonstrate the ability of the anti-αEβ7 to block colitis (inflammation of the colon).

In re Fisher, 166 USPQ 18 indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. Since mice were used as animal model system to reduce the severity of colitis, such animal model studies have not correlated well with in vivo clinical trial results in patients. Since the method of preventing indices of administering to the animal anti-αEβ7 and further anti-α4β7 can be species- and model-dependent, it is not clear that reliance on the mice studies accurately reflects the relative human efficacy of the claimed therapeutic strategy. The specification does not adequately teach how to effectively "treat"/"prevent" inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease or the prevention of inflammation associated with inflammatory bowel disease or reach any therapeutic endpoint in subjects by administering anti-αEβ7 and further anti-α4β7. The specification does not teach how to extrapolate data obtained from mice studies to the development of effective in vivo mammalian therapeutic prevention/treatment, commensurate in scope with the claimed invention. Therefore, it is not clear that the skilled

artisan could predict the efficacy of the anti-αEβ7 and anti -α4β7 exemplified in the specification.

However, an effective treatment/preventive protocol for the treatment/prevention of inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease or the prevention of inflammation associated with inflammatory bowel disease in mammalian subject is subject to a number of factors which enter the picture beyond simply the administration of anti-αEβ7 and anti -α4β7 in an acceptable formulation. Demonstrating decrease in the severity of colitis cannot alone support the predictability of the method for treating/preventing inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease or the prevention of inflammation associated with inflammatory bowel disease through administration of the appropriate formulation. Van Noort et al. (International Review of Cytology, 1998) indicate factors that effect autoimmune disease such as genetic, environmental and hormonal (Page 176, Paragraph 3). For example, inflammatory bowel disease is subject to variables beyond administration of anti-αEβ7 and anti -α4β7. The ability of a host to suppress and thereby treat/prevent inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease from establishing themselves will vary depending upon factors such as the condition of the host and burden of disease.

Therefore, there is insufficient guidance in the specification as to how to determine the subject in whom prevention is desired versus those in whom it is not desired. The specification also does not provide sufficient teaching as to how it can be assessed that treatment/prevention of inflammation associated with asthma, rheumatoid arthritis, autoimmune disease and graft versus host disease in the mice was achieved after the administration of the anti-αEβ7 and anti -α4β7 of the invention.

In view of the quantity of experimentation necessary, the limited working examples, the unpredictability of the art, the lack of sufficient guidance in the specification, and the breadth of the claims, it would take undue trials and errors to practice the claimed invention.

9. Claims 1-7, 10-17, 20-23 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant is in possession of a method of treating inflammation associated with inflammatory bowel disease, with αEβ7 Mab and further comprising administering an α4β7 Mab.

Applicant is not in possession of a method of treating any inflammation in a subject comprising any antagonist to αEβ7 in claim 1, wherein the antagonist is any antibody in claim 2; wherein the inflammation is associated with asthma, rheumatoid arthritis, atoimmune diseases, or graft vs. host diseases in claims 5-7 and 10 and further comprising another therapeutic agent in claim 21, wherein the other therapeutic agent is any antibody in claim 22, or a method of preventing inflammation in a subject, comprising, administering to the subject any antagonist to αEβ7 in claim 11, wherein the antagonist is any antibody in claim 12; wherein the antibody is an αEβ7 Mab and wherein the inflammation is associated with an inflammatory bowel disease' asthma, rheumatoid arthritis, autoimmune diseases and host vs graft disease in claims 14-17 and 20; the method further comprising administering another therapeutic agent in claim 26, wherein the other therapeutic agent is any antibody in claim 27, wherein the antibody is α4β7 Mab in claim 28.

Applicant has disclosed only anti-αEβ7 antibody and anti -α4β7; therefore, the skilled artisan cannot envision all the contemplated antagonist possibilities recited in the instant claims. Consequently, conception cannot be achieved until a representative description of the structural and functional properties of the claimed invention has occurred, regardless of the complexity or simplicity of the method. Adequate written description requires more than a mere statement that it is part of the invention. See *Fiers v. Revel*, 25 USPQ2d 1601, 1606 (CAFC1993). The Guidelines for the Examination of Patent Application Under the 35 U.S.C.112, ¶ 1"Written Description" Requirement make clear that the written description requirement for a claimed genus may be satisfied through sufficient description of a representative number of species disclosure of relevant, identifying characteristics, i.e., structure or other physical and or chemical properties, by functional characteristics coupled with a known or disclosed correlation between function and structure, or by a combination of such identifying characteristics, sufficient to show the applicant was in possession of the genus (Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 20001, see especially page 1106 3rd column).

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the written description inquiry, whatever is now claimed." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.). Consequently, Applicant was not in possession of the instant claimed invention. See University of California v. Eli Lilly and Co. 43 USPQ2d 1398.

Applicant is directed to the Revised Interim Guidelines for the Examination of Patent Applications Under the 35 U.S.C. 112, ¶ 1 "Written Description" Requirement, Federal Register, Vol. 66, No. 4, pages 1099-1111, Friday January 5, 2001.

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 1, 4, 5, 7, 10, 11, 14, 15, 17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,610,281.

The `281patent teaches a method for treatment, i.e. reduction or prevention (column 12, lines 9-13 in particular), of autoimmune disease, which is characterized by inflammation. The treatment comprises the administration of an isolated peptide derived from the extracellular domain of E-cadherin, which binds to αEβ7 and inhibits the adhesion between an IEL and E-cadherin (column 6, lines 14-17 in particular). The `281patent teaches the treatment of ulcerative colitis (inflammation of the colon), asthma, graft versus host disease (column 5, lines 56-63 in particular). Further, the `281 patent teaches that the peptide inhibiting the adhesion of T-lymphocytes is administered with other pharmaceutically active compounds (column 12, lines 21-24 in particular).

The reference teachings anticipate the claimed invention.

12. Claims 1-3, 7, 11-13 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,146, 630 (PTO-892, Reference No. A, in paper No. 5).

The `630 patent teaches a method for treating and preventing autoimmune adenitis (column 8, lines 24-25 in particular) using anti-integrin αEβ7 antibody wherein the antibodies can be monoclonal or polyclonal (column 3, line 5 in particular). It is known to one of ordinary skill in the art at the time the invention was made that autoimmune adenitis is an inflammatory disease.

Claims 7 and 17 are included because the autoimmune adenitis species anticipates the claimed autoimmune diseases genus. See MPEP 2131.02.

The reference teachings anticipate the claimed invention.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1, 6, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,610,281, in view of Baumgart et al (IDS ref #.A8).

The teachings of the `281 patent have been discussed, supra.

The `281 patent further teaches that agents that modulates adhesion between T lymphocytes (e.g., IELs) and E-cadherin expression cells are useful for targeting the delivery of therapeutic agents (column 5, lines 63-65 in particular).

The claimed invention differs from the reference teachings only by the recitation of the inflammation is associated with rheumatoid arthritis in claims 6 and 16.

Baumgart *et al* teach the increase in the expression of αEβ7 that is characteristic of intestinal intraepithelial lymphocytes (iIEL), on T cells in tissues affected by inflammation, partly attributable to an autoimmune disease such as synovial fluid of patients with rheumatic diseases. Baumgart *et al* further teach that αEβ7 can function as an adhesion/retention molecule wherein the expression of αEβ7 can account for T cell adhesion to the epithelium. Finally, Baumgart *et al* teach that the migration of αEβ7 /CD8 T cells can provide a population of activated cells valuable for defense as participants in inflammation throughout the body (see pages 422 and 423 in particular).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to target the αEβ7 expressing T cells in the synovial fluid taught by Baumgart *et al* using the extracellular domain of E-cadherin derived peptide taught by the `281 patent to prevent the adhesion /retention of IEL into the synovial HEV and home to synovial membrane, therefore, treating and preventing inflammation associated with the rheumatoid arthritis.

One of ordinary skill in the art at the time the invention was made would have been motivated to do so because such peptide can reduce the number of infiltrating T cells within the lamina propria lymphocytes (LPL) with high expectation of success in treating inflammation associated with rheumatoid arthritis.

From the combined teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

15. Claims 1-7, 10, 11-17, 20-23 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,610,281, in view of U.S Patent No. 6,146,630, Baumgart *et al* and Hesterberg et al (1997).

The teachings of the `281 and `630 patents and Baumgart *et al* reference have been discussed, supra.

The `281 patent further teaches that agents that modulates adhesion between T lymphocytes (e.g., IELs) and E-cadherin expression cells are useful for targeting the delivery of therapeutic agents (column 5, lines 63-65 in particular).

Hesterberg *et al* teach a method of ameliorating and treating an animal with chronic colitis with $\alpha 4\beta 7$ Mab (abstract in particular). Hesterber *et al* further teach that the $\alpha 4\beta 7$ Mab rapidly improved stool consistency and the $\alpha 4\beta 7$ integrin represents a novel, potent and organ-specific therapeutic target for the therapeutic modulation of inflammation in the gastrointestinal tract (see page 1379, last paragraph in particular).

The claimed invention differs from the reference teachings only by the recitation of the antagonist is an antibody in claims 2 and 12, the antibody is an $\alpha E\beta 7$ Mab in claims 3 and 13, wherein the other therapeutic agent is an antibody in claims 22 and 27, and the antibody is an $\alpha 4\beta 7$ Mab in claims 23 and 28.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the peptide and the pharmaceutically active compound in the method of treatment taught by `281 patent with $\alpha E\beta 7$ Mab taught by the `630 patent and $\alpha 4\beta 7$ Mab taught by Hesterberg *et al* in methods of treating and preventing an inflammatory bowel disease, asthma, rheumatoid arthritis, autoimmune diseases and graft versus host disease as taught by `281 patent.

One of ordinary skill in the art at the time the invention was made would have been motivated to do so because such antibody that modulates adhesion between T lymphocytes (e.g., IELs) and E-

cadherin expressing cells are useful for targeting the delivery of therapeutic agents such as the antibody αEβ7 taught by the '281 patent and targeting α4β7 integrin represents a novel, potent, and organ-specific therapeutic target for the therapeutic modulation of inflammation in the gastrointestinal tract as taught by Hesterber *et al.*

From the combined teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

16. No claim is allowed

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad, whose telephone number is (703) 306-3472. The examiner can normally be reached Monday to Friday from 8:00 to 4:30. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached at (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

Maher Haddad, Ph.D.
Patent Examiner
Technology Center 1600
August 26, 2002

Christina Chan

CHRISTINA CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600